UNITED STATES PATENT AND TRADEMARK OFFICE

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10/536,591	05/27/2005	Robert Mark Stefan Porter	282548US8XPCT	9206

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EXAMINER
THOMAS, MIA M

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/536,591	PORTER ET AL.
	Examiner	Art Unit	
	Mia M. Thomas	2624	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 February 2008</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>28 February 2008</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   This Office Action is responsive to applicant's remarks/arguments. Claims 1-11 are presently pending in this case. Claims 1-11 are amended and claims 12-14 are canceled without prejudice or disclaimer by the present amendment. As amended claims 1-11 are supported by the original claims, and no new matter is added.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3.   The drawings are objected to under 37 CFR 1.83(a) because they fail to show appropriate contrast and detailed descriptions as described in the specification. Specifically, with respect to Figures 7, 8, 13a-c, and 25 the details as presented with this instant application appears in many instances blurred, distorted and unclear. It appears that the scanning of these drawings may also be deficient causing the printing of these drawings to be unclear to the Examiner. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the

remaining figures. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR

1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance. Examiner suggests adjusting the contrast before the

scanning of these documents to prevent future transmission problems concerning the scanning

of these drawings.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject
Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> In contrast, a claimed computer-readable medium encoded with a computer program is a computer
> element which defines structural and functional interrelationships between the computer program and
> the rest of the computer which permit the computer program's functionality to be realized, and is thus
> statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

> Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency,
> voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are
> nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear
> that a claim reciting a signal encoded with functional descriptive material falls within any of the
> categories of patentable subject matter set forth in Sec. 101.

> ... a signal does not fall within one of the four statutory classes of Sec. 101.

> ... signal claims are ineligible for patent protection because they do not fall within any of the four
> statutory classes of Sec. 101.

5.   Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter as follows. Claim 11 is drawn to functional descriptive material

recorded on a computer readable medium. Normally, the claim would be statutory. However,

the specification, at paragraph [0314] recites the claimed computer readable medium as

encompassing statutory media such as a "ROM", "hard drive", "optical drive", etc, as well as

non-statutory subject mater such as a "signal" or in this instance a transmission medium which

also includes a transmission signal.

A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore
does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any
physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure

encompasses non-statutory subject matter, the claim as a whole is non-statutory. The examiner

suggests amending the claim to _include_ the disclosed tangible computer readable media, while

at the same time _excluding_ the intangible media such as signals, carrier waves, transmission

mediums, etc. Any amendment to the claim should be commensurate with its corresponding

disclosure.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1, 2, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia

et al. "Face Detection Using Quantized Skin Color Regions Merging and Wavelet Packet

Analysis", pages 264-277-13 July 1999 in combination with Toyama (US 6792135 B1).

Regarding (Currently Amended) Claims 1:

Garcia teaches <u>a face</u> detection apparatus in which an image region of a test image is compared with data indicative of the presence of a face ("...a novel scheme for human face detection in color images under constrained scene conditions...the face image represented as a 2-D array of intensity values is compared to a single or several templates representing a whole face." at pages 264, abstract and right column, paragraph 2; respectively); comprising:

a face detector <u>configured</u> to perform face detection on regions of the test image other than those identified by the pre-processor as low-difference regions (Refer to "DiVan"-Distributed audiovisual Archives Network System, specifically "As a preliminary work, we presented in [17], a face detector which had been developed in order to index a hug amount of video and image data and to cope with high-speed requirements." at page 265, left column, paragraph 2).

Garcia does not specifically demonstrate identification of low-difference regions of the test image where there exists less than a threshold image difference across groups of pixels within those regions;

however,   Toyama   teaches:
a pre-processor <u>configured</u> to identify low-difference regions of the test image where there exists less than a threshold image difference across groups of pixels within those regions (Refer to Figure 3, numeral 320). For clarity, Toyama teaches "the preprocessing module at numeral 320 in further detail at Figure 5. The pre-processor as taught by Toyama is configured to calculate and identify the low-difference regions (i.e. Figure 5, numeral 532, 540, 572, 582, 588). Additionally, refer to column 7, lines 41-column 8, line 37. The explanation for the

identification of low-difference regions of the test image are to be interpreted as this explanation describes for all claims now referring to low-difference regions.

Garcia and Toyoma are combinable because they are in the same field of image segmentation with specific reference to biometric or personal identification using facial characteristics.

At the time that the invention was made it would have been obvious to one of ordinary skill in the art to utilize a pre-processor to identify low-difference regions of a test image where there exists less than a threshold image difference across groups of pixels within those regions.

The suggestion/motivation to do so would have been "for performing the preprocessing listed above. Additionally, in a preferred embodiment, the preprocessing module includes a resizing module 400 for resizing the cropped image." at column 7, line 40+, Toyoma. By the preprocessing that is configured to perform this operation of identification of low-difference regions, the user is able to perform multiple enhancements, and further expedite additional processes. (at column 7, line 24+, Toyoma)

Therefore, it would have been obvious to combine the teaching of Garcia with the teaching of Toyoma to obtain the specified claimed elements of claim 1.

Regarding (Currently Amended) Claim 2:

Garcia teaches the face detection apparatus wherein the region is a rectangular region ("In our previous work [17], skin-color filtering was applied on "I" frames at MPEG macro-block level (16x16 pixels), providing a macro-block binary mask which was segmented into non-overlapping

rectangular regions containing contiguous regions of skin color macro-blocks(binary mask segment areas)." at page 267, right column, Section III, paragraph 2);

Toyama teaches the pre-processor <u>is configured </u>to identify low-difference regions only with respect to pixels in a central portion of the regions (Refer to numeral 320 in further detail at Figure 5. The pre-processor as taught by Toyama is configured to calculate and identify the low-difference regions (i.e. Figure 5, numeral 532, 540, 572, 582, 588). Additionally, refer to column 7, lines 41-column 8, line 37.)

Garcia and Toyoma are combinable because they are in the same field of image segmentation with specific reference to biometric or personal identification using facial characteristics.

The suggestion/motivation to combine the teaching of Garcia with Toyoma would have been "for performing the preprocessing listed above. Additionally, in a preferred embodiment, the preprocessing module includes a resizing module 400 for resizing the cropped image." at column 7, line 40+, Toyoma. By the preprocessing that is configured to perform this operation of identification of low-difference regions, the user is able to perform multiple enhancements, and further expedite additional processes. (at column 7, line 24+, Toyoma)

Therefore, it would have been obvious to combine the teaching of Garcia with the teaching of Toyoma to obtain the specified claimed elements of claim 2.

Regarding (Currently Amended) Claim 4:

Toyoma teaches the face detection apparatus wherein the pre-processor is configured to identify high-difference regions of the test image where there exists greater than a threshold image difference across groups of pixels within those regions. (Refer to numeral 320 in further detail at Figure 5. The pre-processor as taught by Toyama is configured to calculate and identify the low-difference regions (i.e. Figure 5, numeral 532, 540, 572, 582, 588). Additionally, refer to column 7, lines 41-column 8, line 37.)

Garcia teaches the face detector is configured to perform face detection on regions of the test image other than those identified by the pre-processor as low-difference regions or high-difference regions (Refer to "DiVan"-Distributed audiovisual Archives Network System, specifically "As a preliminary work, we presented in [17], a face detector which had been developed in order to index a hug amount of video and image data and to cope with high-speed requirements." at page 265, left column, paragraph 2).

Garcia and Toyoma are combinable because they are in the same field of image segmentation with specific reference to biometric or personal identification using facial characteristics.

The suggestion/motivation to combine the teaching of Garcia with Toyoma would have been "for performing the preprocessing listed above. Additionally, in a preferred embodiment, the preprocessing module includes a resizing module 400 for resizing the cropped image." at column 7, line 40+, Toyoma. By the preprocessing that is configured to perform this operation of identification of low-difference regions, the user is able to perform multiple enhancements, and further expedite additional processes. (at column 7, line 24+, Toyoma).

Therefore, it would have been obvious to combine the teaching of Garcia with the teaching of Toyoma to obtain the specified claimed elements of claim 4.

Regarding (Currently Amended) Claim 5:

Garcia discloses <u>the face detection apparatus</u> <u>wherein</u> the face detector is <u>configured</u>: to derive a set of attributes from respective blocks of a region ("In the first case, some geometrical measures about distinctive facial features such as eyes, mouth, nose and chin are extracted." at page 264, right column, section 1, paragraph 2); to compare the derived attributes with attributes indicative of the presence of a face ("In the second case, the face image, represented as a two—dimensional (2-D) array of intensity values, is compared to a single or several templates representing a whole face." at page 264, right column, section 1, paragraph 2); to derive a probability of the presence of a face by a similarity between the derived attributes and the attributes indicative of the presence of a face ("A set of simple statistical data is extracted from these coefficients, in order to form vectors of face descriptors, and a well-suited probabilistic metric derived from the Bhattacharyya distance is used to classify the feature vectors into face or non-face areas, using some prototype face area vectors, which have been built in a training stage." at page 265, right column, paragraph 1); and to compare the probability with a threshold probability ("Less false alarms are obtained by using the CMU face detector…By tuning the threshold used for classification according to the prototypes face features vectors, it is possible to control the final false alarms rate..." at page 276, left column, paragraph 2).

Regarding (Currently Amended) Claim 6:

Garcia discloses <u>the face detection apparatus</u> <u>wherein</u> the attributes comprise the projections of image areas onto one or more image eigenvectors ("In the second case, several correlation templates are used to detect local sub-features which can be considered as rigid in appearance (view-based Eigen spaces [29]) or deformable (deformable templates [034]." at page 265, left column, section 1, paragraph 1).

8.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al. "Face Detection in Color Images Using Wavelet Packet Analysis", pages 703-708, 13 July 1999 in combination with Toyama (US 6792135 B1).

Regarding Claim (Currently Amended) 10:

Garcia teaches a method of face detection, in which an image region of a test image is compared with data indicative of the presence of a face ("...a novel scheme for human face detection in color images under constrained scene conditions...the face image represented as a 2-D array of intensity values is compared to a single or several templates representing a whole face." at pages 264, abstract and right column, paragraph 2; respectively); the method comprising the steps of:

identifying the low-difference regions of the test image where there exists less than a threshold image difference across a group of pixels within those regions; and (Refer to "DiVan"-Distributed audiovisual Archives Network System, specifically "As a preliminary work, we presented in [17], a face detector which had been developed in order to index a hug amount of video and image data and to cope with high-speed requirements." at page 265, left column, paragraph 2; Also,

Garcia teaches at page 704, right column, paragraph 3, "Using these thresholds, we found that the segmentation results are affected by variations in lighting conditions., Further refer to page 705, Section 3 and 4).

Toyoma teaches performing face detection on regions of the test image other than those identified by the preprocessor as low-difference regions (Refer to Figure 3, numeral 300; For clarity, the Examiner is stating that the hypothesis module is able to evaluate the image regions to determine the high and low difference regions, further refer to column 6, line 25+, specifically, "Based a comparison between the relational value and a threshold value, the system 210 determines whether a face has been detected in the cropped image (box 360). If not, then a face is not within in the sub-region that was examined and a different sub-region needs to be generated (box 370).").

Garcia and Toyoma are combinable because they are in the same field of image segmentation with specific reference to biometric or personal identification using facial characteristics.

The suggestion/motivation to combine the teaching of Garcia with Toyoma would have been "for performing the preprocessing listed above. Additionally, in a preferred embodiment, the preprocessing module includes a resizing module 400 for resizing the cropped image." at column 7, line 40+, Toyoma. By the preprocessing that is configured to perform this operation of identification of low-difference regions, the user is able to perform multiple enhancements, and further expedite additional processes. (at column 7, line 24+, Toyoma).

Therefore, it would have been obvious to combine the teaching of Garcia with the teaching of Toyoma to obtain the specified claimed elements of claim 10.

Regarding Claims 12-14: (Canceled)

9.   Claims 3, 7-9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Garcia et al. "Face Detection Using Quantized Skin Color Regions Merging and Wavelet Packet

Analysis", pages 264-277-13 July 1999 in combination with Toyama (US 6792135 B1) and

further in view of Hong et al. (US 6504942 B1).

Regarding (Currently Amended) Claim 3:

Garcia in combination with Toyoma teaches the face detecting apparatus as shown above.

Although not specifically detailed in the literature associated with this non-patent literature

document (Garcia), it is obvious that the face detection apparatus is configured to perform the

same "regional analysis" as taught by Hong. Hong is used to expressly identify the portions in

which the claimed invention points to a central region exceptionally as shown diagrammatically

at Figure 6 (Hong).

Hong teaches <u>the face detection apparatus</u> <u>wherein</u> the central portion of a region comprises all

of the region except for two strips, one at each side of the region (Refer to Figure 6, numeral 7).

Garcia, Toyoma and Hong are combinable because they are in the same field of image

segmentation, specifically with regards to personal identification using characteristics of the

face.

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to exemplify the teachings of Garcia regarding the central portion of a region comprises all of the region except for two strips, one at each side of the region as taught by Hong.

The suggestion/motivation for doing so would have been because this allows the user to determine the background and foreground diagrammatically.

Regarding (Currently Amended) Claim 7:

Hong teaches <u>the face detection apparatus</u> <u>wherein</u> the groups of pixels comprise pairs of adjacent pixels (Refer to Figure 8; "An object pixel is regarded as inside the object if all its adjacent pixels are also foreground pixels. These adjacent pixels may be defined as the 4-connected neighbors as illustrated at 22 in FIG. 8 or as the 8-connected neighbors as illustrated at 23 in FIG. 8. There is no operation required for object pixels inside the object." at column 20, line 39).

Regarding (Currently Amended) Claims 8:

Hong teaches <u>a video</u> conferencing apparatus comprising <u>the face detection</u> apparatus according to claim 1 ("Further possible applications include video communication, video conferencing, television broadcasting, Internet multimedia applications, MPEG-4 applications, face detection applications and real time video tracking systems such as observer tracking auto stereoscopic 3D displays. A specific application of such techniques is in digital video cameras

and other digital image capture and recording devices for multimedia applications. An example of such a device is the Sharps(RTM) Internet ViewCam." at column 1, line 16).

Regarding (Currently Amended) Claims 9:

Hong teaches a surveillance apparatus comprising the face detection apparatus according to claim 1 ("Further possible applications include video communication, video conferencing, television broadcasting, Internet multimedia applications, MPEG-4 applications, face detection applications and real time video tracking systems such as observer tracking auto stereoscopic 3D displays. A specific application of such techniques is in digital video cameras and other digital image capture and recording devices for multimedia applications. An example of such a device is the Sharps(RTM) Internet ViewCam." at column 1, line 16).

Regarding (*Currently Amended*) Claim 11:

Hong teaches a tangible computer readable medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform the method according to claim 10 ("The method may be performed on any suitable apparatus such as that illustrated in FIG. 9. A programmed data processor comprises a central processing unit (CPU) 30 connected to a CPU bus 31. A system memory 32 is connected to the bus 31 and contains all of the system software or program for operating the data processor." at column 21, line 31).

Response to Arguments

Drawings

10.   Applicant's arguments, see pages 7-8, with reference to Drawings (Figures) have been fully considered and most of the remarks are persuasive per the discussion of the Figures noted in the remarks/arguments as noted by the applicant.

Examiner's Response: The objection to the drawings of Figure 18, 25, 27A and B, 29, 30 and 32 are withdrawn.

Summary of Remarks: Refer to page 7, paragraph 5. "The fuzzy and varying nature of the blocks is conveyed by the figures. Thus, these figures are believed to be proper. Also refer to page 8, paragraph 8.

Examiner's Response: *Examiner disagrees.* As shown at page 4/26 "Substitute Sheet-Drawings", the Examiner does not appear to see the same Drawings that applicant's representatives believes to be proper. There are several squares of each "Eigenblock" that the Examiner believes to be simply black and without content or details. The figures are not "fuzzy". The Examiner is fully aware of the mathematical representation of what an Eigenblock would appear to look like, however, the drawings of Figure 7 and 8 do not exemplify the "face detection eigenblocks" that the Examiner believes are intended to be conveyed. Perhaps colored drawings or supplementary black and white drawings submitted in another format other that which has been used previously would fully convey the "eigenblocks" of Figure 7 and 8.

With respect to Figures 13a-c (bottom); the Examiner fully understands that these drawings are intended to convey probability maps of an image, as associated with those drawings on top of these figures. However, as also stated above with respect to figure 7, the contrast is not appropriate or is not being conveyed to the Examiner as the applicant's representative is viewing these figures. The Examiner simply sees blocks that appear to be detecting "something" from the Figures above these drawings. If these Figures were submitted in another format, the Examiner and the general public would be easily able to associate the appropriate "dark spot" on the map. Currently, the Examiner is not able to locate the "dark spot on the map" the potential dark spots are not visible nor clear.

With regards to Figure 25, page 17/26 "Substitute Replacement Sheet"; the Examiner is unable to clearly identify the images associated with numeral 1100 and 1110. Appropriate contrast correction is required.

Specification

11. Applicant's arguments see page 8 of the remarks submitted on 28 February 2008 and also noted below have been fully considered and are persuasive. The objection of the specification **(abstract)** has been withdrawn.

Summary of Remarks: Refer to page 8, paragraph 9. The objections to the specification, title and abstract are amended herewith to place them in conformance with U.S. practice. No new matter is added. The objections to the specification, title, and abstract are believed to be overcome.

Examiner's Response: Examiner agrees. The objection to the specification, title and abstract are withdrawn and amendments are entered herewith this response.

Examiner's Note: As described at page 2 of the amendment/remarks received on 28 February 2008, the Examiner notes that the applicant intends to include "Cross Reference to Related Applications" into the specification. However, it is not specifically noted where, (i.e. what location, for example, page 1, line 1) to include this information. This is the Examiner's observation so that if this instant application would mature into a United States Patent, the legal staff would be apprised to all the information concerning arrangement of the specification, specifically the addition of "Cross Reference to Related Applications" to clarify, however, this amendment will be entered herewith this response.

12.   Applicant's arguments filed with respect to U.S.C 101 Rejections at page 9 of the remarks/arguments have been fully considered but they are not persuasive.

<u>Summary of Remarks:</u> "Claim 11 is amended to recite a "tangible computer readable medium," which is an article of manufacture. Accordingly, it is respectfully submitted that Claim 11 is in compliance with all requirements under 35 U.S.C. 101. Claims 12-14 are canceled without prejudice or disclaimer herewith, making this rejection moot with respect to these claims.

<u>Examiner's response:</u> Examiner disagrees. The arguments with respect to Claims 12-14 are indeed moot, exclusive of the cancellation of those claim limitations, however the specification also recites non-statutory subject matter wherein the computer readable medium is defined as a

transmission medium (refer to paragraph [0314] of the specification) which is non-statutory so
the rejection of Claim 11 stands.

Claim Rejections - 35 USC § 103

13.   Applicant's arguments with respect to claims 1, at page 9-10 have been considered but
are moot in view of the new ground(s) of rejection. Consequently, Claim 1 (and claims 2-9
dependent therefrom) are also moot in view of the new grounds of rejection.

14.   Applicant's arguments with respect to claim 10, at page 11 have been considered but
are moot in view of the new ground(s) of rejection. Consequently, Claim 10 (and claim 11
dependent therefrom) are also moot in view of the new grounds of rejection.

Conclusion

15.   Applicant's amendment necessitated the new ground(s) of rejection presented in this
Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant
is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within TWO
MONTHS of the mailing date of this final action and the advisory action is not mailed until after
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mia M. Thomas whose telephone number is (571)270-1583. The examiner can normally be reached on Monday-Thursday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mia M Thomas/
Examiner, Art Unit 2624

/Vikkram Bali/
Supervisory Patent Examiner, Art Unit 2624